## PP&DS IMPORTANT QUESTIONS

# UNIT-I

- 1. What is Python? Write syntax? Explain with example?
- 2. What are the main important Features and Application in Python in detail with examples?
- 3. What is datatypes in python? Explain in detail with syntax and examples?
- 4.Explain what is input and output evaluation in python with examples?
- 5. What is Control Statements? Explain in detail with examples?
- 6. What is the String and String Builder with Examples?
- 7. What is Strings? Write Syntax? what a program with output?
- 8. How will you concatenate strings? write a program with output?
- 9. What are the operations with strings with example explain in detail?
- 10. What are the string testing methods explain with examples?
- 11. What is Python collections Lists, Dictionaries, Tuples with examples in detail?
- 12.List the basic constructs of Python?
- 13. Apply the conditional execution of the program?
- 14.Design programs for manipulating strings?
- 15. Use the data structure lists, Dictionaries and Tuples?

# UNIT-II

- 1.Define Function? What are the types of the functions with Example?
- 2. How many calling functions are there give example?
- 3.hat meant by multiple values from a function and write program in python?
- 4. How you define functions are first class objects and write program on that?
- 5. What is meant by positional arguments? Explain in detail?
- 6. What are the differences between formal and actual argument give examples?
- 7. Explain in detail Recursive function and write in detail?
- 8. Explain in detail about Exceptions write complete notes?
- 9. Classify exceptions and explain the ways of handling them?

### **UNIT-III**

- 1.what is meant by NumPy?? Explain in Detail with Examples?
- 2.write short notes on Pandas?? Explain in detail with examples??
- 3.what is meant by Matplotlib? what are the types and explain each in detail??
- 4. What is meant by EDA? Explain and classify in detail??
- 5. What are the types of EDA? Explain in detail?
- 6.classify Data Science Life Cycle? what are the types and draw architecture?
- 7. What is meant by Descriptive Statistics? explain with example?
- 8. What are basic tools in EDA? explain in detail with following examples?
- 9.what is meant by Data visualization? explain with following examples?
- 10. What is meant by Philosophy of EDA?

# UNIT-IV

- 1. What is Pattern Recognition and Machine Learning? Explain in detail?
- 2. What are the different types of Pattern Features, Pattern representation & Dimensionality reduction?
- 3. What is the difference between linear and non-linear?
- 4.Explain Bayesian Perceptron? Explain in detail?
- 5. Classify Nearest neighbours' classifier? Explain?
- 6. What is meant by Logistic regression? Classify??
- 7. Explain Decision trees and random forests? Explain??
- 8.Explain k-means clustering Regression? Write example?
- 9. Explain Confusion matrix, Evaluation metrics? Explain in detail?
- 10. What is mean by Cost Functions and Cross Validation??

### UNIT-V

- 1.What is Multilayer perceptron Backpropagation and classify?
- 2.What is Loss functions and Write example?
- 3.Describe Hyperparameter tuning and neat sketch with example?
- 4.What are the differences b/w of RNN, CNN and LSTM?
- 5.Describe of Data Science Models?
- Applications to text
- · images, videos,
- recommender systems,
- · image classification,
- · Social network graphs
- Write in Details of Data science models??